

# WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

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February 9, 2004

TO: Internal File

THRU: Daron Haddock, Permit Supervisor

FROM: Steve Fluke, Reclamation Hydrogeologist

RE: 2003, First Quarter Water Monitoring, West Ridge Resources, Inc.,  
West Ridge Mine, C/007/0041-WQ03-1, Task ID #38

1. Was data submitted for all of the MRP required sites? YES [ X ] NO [ ]

2. On what date does the MRP require a five-year resampling of baseline water data.

**Resampling due date.**

Five-year baseline resampling to occur at the time of the mid-term review. The next baseline resampling will be conducted by October 1, 2006.

3. Were all required parameters reported for each site? YES [ X ] NO [ ]

4. Were irregularities found in the data? YES [ X ] NO [ ]

Of the eight monitored springs, seven could not be accessed due to mud and snow (SP-80, SP-12, SP-13, SP-15, SP-8, WR-1, and WR-2). No other irregularities were found regarding the springs.

Of the nine monitored streams, three could not be accessed due to mud and snow (ST-3, ST-9, and ST-10). Stream monitoring sites ST-5 and ST-6, located within C Canyon and downstream of the mine site, collect mine-discharge water mixed with storm water runoff when their automatic sampling devices are triggered by increased flow due to a storm event. The samples sit in the automatic samplers for an unknown period of time before being collected and sent to the laboratory for analysis. Although the validity of the samples is highly questionable, elevated concentrations of pH, conductivity, TDS, and sulfate were reported for both monitoring sites, and elevated concentrations of total iron for site ST-5.

**5. Were DMR forms submitted for all required sites?**

1<sup>st</sup> month, YES [ X ] NO [ ]  
2<sup>nd</sup> month, YES [ X ] NO [ ]  
3<sup>rd</sup> month, YES [ X ] NO [ ]

DMR data is submitted to the DOGM database. No flow was reported for UPDES site 001 (discharge from the sediment pond) and for the first month (January) for UPDES site 002 (discharge to C Canyon).

**6. Were all required DMR parameters reported?**

YES [ ] NO [ X ]

Missing oil and grease data for February 2003.

**7. Were irregularities found in the DMR data?**

YES [ X ] NO [ ]

The flow data input and downloaded in the DOGM database was inaccurate and included mine-water discharge to the sediment pond along with the discharge to C Canyon for UPDES site 002. This resulted in TDS calculations that exceed the maximum discharge limitation of 2000 lbs/day.

**8. Based on your review, what further actions, if any, do you recommend?**

Discuss with the permittee and mine hydrologist if the automatic sampling method for some of the stream sites can be improved upon. Implement a plan to have the automatic sampler collection and holding times reported to DOGM to aid in the evaluation of the analytical results.

Although elevated concentrations of some parameters were reported for ST-5 and ST-6, the concentrations were consistent with what would be expected from the mine discharge mixed with ephemeral storm-water runoff.

The permittee was not aware that a monthly oil and grease sample was to be collected for UPDES site 002 at the time of the first sampling event in February. Subsequent samples for oil and grease have been collected at this outfall on a monthly basis and no maximum discharge limitations have been exceeded. No further action is recommended.

The permittee has sent a corrected analytical results table for UPDES site 002 to DOGM to update the database. With the exception of the missing oil and grease data for February, no other parameters are out of compliance.